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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,430	03/29/2001	Mitchell M. Jackson	3085R	5042

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THE LUBRIZOL CORPORATION
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EXAMINER

MEDLEY, MARGARET B

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,430

Applicant(s)

JACKSON ET AL.

Examiner

Margaret B. Medley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15 and 18-30 is/are pending in the application.
- 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) ☐ Claim(s) is/are allowed.
- 6) ☒ Claim(s) 15 and 18-30 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s)
- 4) ☐ Interview Summary (PTO-413) Paper No(s)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 14, 2003 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 15, 18-26 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art.

Applicants make admission on record, the last paragraph at page 1 of the instant specification, that prior art Fuentes-Afflick et al (Fuentes-Afflick) EP 09/497,576 A1 discloses fuel compositions that include aliphatic hydrocarbyl substituted amines and/or polyetheramines and esters of carboxylic acids and polyhydric alcohols to improve fuel economy.

A careful study of Fuentes-Afflick discloses that patentee teaches a fuel composition comprising gasoline and a fuel additive composition comprising (a) at least one amine compound selected from (1) an aliphatic hydrocarbyl-substituted amine and (2) a poly(oxyalkylene) amine; and (b) an ester of a carboxylic acid and a polyhydric alcohol, abstract, page 3, lines 9-24. Patentee further provides for the further inclusion of other fuel additives in fuel, including detergents page 10, lines 34-37. The preferred organic solvents for the fuel additive include aromatic hydrocarbon alone or in combination with the aromatic solvents, page 10, and line 26-31.

Fuentes-Afflick further teaches that the unique combination of an aliphatic hydrocarbyl-substituted amine or a poly (oxyalkylene) amine, note claim 15 and page 5, line 40 to page 8, line 35, and an ester of a carboxylic acid and a polyhydric alcohol, preferably glycerol monooleate, page 10, line 9 and page 9, line 33 to column 10, lines 1-10, significantly reduces fuel consumption in an internal combustion engine (ICE) and unexpectedly provides a greater reduction in friction than either component by itself, page 3, lines 28-31.

Patentee further provides a method for reducing fuel consumption in an ICE, which comprises operating the engine with the said fuel composition; page 3, lines 26-27 and claim 36.

The gasoline composition and method of Fuentes-Afflick render obvious instant claims 15, 18-19, 22-26 and 29-30. With respect to claim 26 being a mixture of mono and dioleate of

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glycerol, it is the examiner's position that commercial available glycerol monooleate contains dioleate glycerol as impurities.

Applicants make admission on record in paragraph 4 on page 1 of the instant specification that prior art Block (Block) WO 93/21,288 disclose lubricating oils, such as engine oils and transmission fluids, that include an alkoxylated amine and an ester of a fatty acid that provide enhanced fuel economy.

A careful study of Block discloses that a combination of one or more alkoxylated hydrocarbylamines and one or more polyol fatty acid esters imparts a more enhanced friction modifying property to the lubricant than an equivalent quantity of either component alone, page 3, paragraph 2. The preferred esters include glycerol monooleate. The most preferred esters are a mixture of glycerol monooleate and dioleate, the third full paragraph on page 9, that correspond to instant claims 22-26. The Formula 2 found on page 5 is the most preferred alkoxylated amine, that correspond to instant claims 20-21.

Block provides the motivation for selecting an alkoxylated fatty amine compound that correspond to the alkoxylated fatty amine of instant claims 20-21 as the alkoxylated fatty amine of Fuentes-Afflick with the reasonable expectation that it will exhibit the same synergistic properties in a gasoline composition as exhibit in the lubricant composition to render obvious instant claims 20-21.

Applicants made admission on record at paragraph 5 on page 1 of the instant specification that prior art Schilowitz US 5,968,211 discloses lubricity additive concentrates that include esters of fatty acids and alkoxylated amines.

A careful study of Schilowitz discloses that fatty acids, oligomers of such acids and the esters of such acids, are useful as anti-friction and wear reducing additives in gasoline and diesel fuels that are formulated into an additive concentrate which remains liquid at low temperatures of down to about 0°F (-17.78°C) by the additional presence in the concentrate of an alcohol, an amine or a mixture of alcohol and amine. The fatty acids and their esters are typically derived from naturally occurring fats and oils and include those known as tall oil acids and their esters, note the bridging paragraph of columns 2-3. Patentee further discloses that an aromatic solvent is used in the concentrate with the said lubricity additive along with the said alcohol and/or amine, note column 2, lines 18-30. The Ethomeen C/12 is an ethoxylated cocoa alkylamine, note column 3, lines 31-32 and example 31, and is the same alkoxyated fatty amine of instant claims 20-21.

Schilowitz provides the motivation and teachings to select the aromatic and/or alcohol or amine solvent of Fuentes-Afflick with the reasonable expectation that the solvents will allow the concentrate composition to be a liquid at a temperature of about 0°C to minus 18°C .

It would have been obvious to the artisan in the art with the combined teachings of the Admitted Prior Art that the artisan in the art would have selected a fuel composition comprising gasoline, a solvent comprising aromatic hydrocarbon, a mixture of alcohol and an aromatics hydrocarbon, a mixture of alcohol and an aromatic hydrocarbon that would allow the concentrate composition to be a liquid at a temperature of about 0°C to minus 18°C , to select an alkoxyated fatty amine having the formula of instant claims 20 and 21, and to select a partial ester having a free hydroxyl group having carbon atoms fatty carboxylic acid and glycerol of instant claims 23-26 to render instant claims 15 and 20-26 obvious. The prior art also teaches nitrogen-containing

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detergent, particularly poly ethylamine, with partial ester rendering claims 29-30 obvious. The prior art also teaches adding the fuel to an ICE for the purpose of reducing fuel consumption that render instant claims 18 and 2 obvious. It is state of the art knowledge that energy is extract from an engine by combusting the fuel in an engine.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art as applied to claims 15, 18-26 and 29-30 above, and further in view of Wyman 3,250,715.

The Admitted Prior Art is silent to the polymeric pour point depressant of instant claim 28. However, the Admitted Prior Art provide for the further inclusion of conventional gasoline additives that would provide for the inclusion of a conventional pour depressant that would be reasonable expected to be used with a fuel composition comprising aromatic hydrocarbon solvent at temperatures of about 0°C to minus 18°C that would experience thicken problems at such low temperatures.

Wymann teaches a terpolymer formed by polymerizing a dialkyl fumarate, vinyl carboxylate, and a vinyl ether polymeric pour point depressant and are prepared as a polymer solution in benzene, column 1, lines 9-11, 42-47, 51-66 and column 3, lines 8-19 as a pour point depressant. It would have been obvious to the artisan in the art to further add the pour point depressant of Wymann to the fuel composition of the Admitted Prior Art with the reasonable expectation that it would depress the pour point of the aromatic hydrocarbon at the low temperature of 0°C to minus 18°C .

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

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Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15 and 18-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, 10-17, 19, 21 and 23 of U.S. Patent No. 6,224,642 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the fuel composition comprising a solvent is not exclude from patentee fuel composition containing the open-ended language "comprising" and the mixture of (B) components of patentee are the same components of A and B of the instant claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18 and 19 appear to duplicate one another in that the method step is the same "fueling the engine with the fuel composition of claim 15. It is suggested that applicant should combined the claims and cancel the other.

The previous rejections are withdrawn in view of the above rejections.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is (703) 308-2518. The examiner can normally be reached on Monday--Friday from 7:30 a.m. to 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

M.B. Medley/dh
March 12, 2003


MARGARET MEDLEY
PRIMARY EXAMINER